

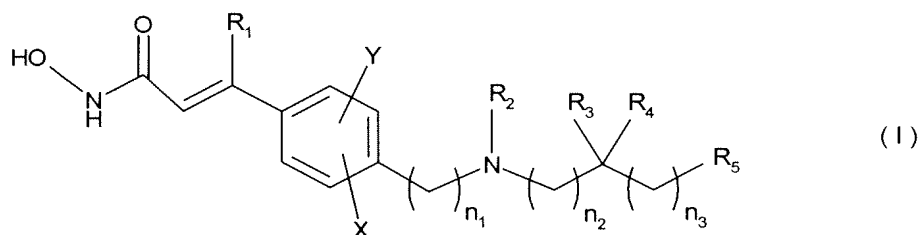
Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-19 (canceled)

Claim 20 (currently amended): A method for enhancing graft survival following transplant, comprising administering to an animal previous to, concurrently with, or subsequent to a transplant procedure an effective amount of an histone deacetylase inhibitor compound of formula I ~~according to claim 16~~.



wherein

R₁ is H, halo, or a straight chain C₁-C₆ alkyl;

R₂ is selected from H, C₁-C₁₀ alkyl, C₄ - C₉ cycloalkyl, C₄ - C₉ heterocycloalkyl, C₄ - C₉ heterocycloalkylalkyl, cycloalkylalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl, -(CH₂)_nC(O)R₆, -(CH₂)_nOC(O)R₆, amino acyl, HON-C(O)-CH=C(R₁)-aryl-alkyl- and - (CH₂)_nR₇;

R₃ and R₄ are the same or different and independently H, C₁-C₆ alkyl, acyl or acylamino, or R₃ and R₄ together with the carbon to which they are bound represent C=O, C=S, or C=NR₈, or R₂ together with the nitrogen to which it is bound and R₃ together with the carbon to which it is bound can form a C₄ - C₉ heterocycloalkyl, a heteroaryl, a polyheteroaryl, a non-aromatic polyheterocycle, or a mixed aryl and non-aryl polyheterocycle ring;

R₅ is selected from H, C₁-C₆ alkyl, C₄ - C₉ cycloalkyl, C₄ - C₉ heterocycloalkyl, acyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl, aromatic polycycle, non-aromatic polycycle, mixed aryl and non-aryl polycycle, polyheteroaryl, non-aromatic polyheterocycle, and mixed aryl and non-aryl polyheterocycle;

n, n₁, n₂ and n₃ are the same or different and independently selected from 0 - 6, when n₁ is 1-6, each carbon atom can be optionally and independently substituted with R₃ and/or R₄;

X and Y are the same or different and independently selected from H, halo, C₁-C₄ alkyl, NO₂, C(O)R₁, OR₉, SR₉, CN, and NR₁₀R₁₁;

R₆ is selected from H, C₁-C₆ alkyl, C₄ - C₉ cycloalkyl, C₄ - C₉ heterocycloalkyl, cycloalkylalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl, OR₁₂, and NR₁₃R₁₄;

R₇ is selected from OR₁₅, SR₁₅, S(O)R₁₆, SO₂R₁₇, NR₁₃R₁₄, and NR₁₂SO₂R₆;

R₈ is selected from H, OR₁₅, NR₁₃R₁₄, C₁-C₆ alkyl, C₄ - C₉ cycloalkyl, C₄ - C₉ heterocycloalkyl, aryl, heteroaryl, arylalkyl, and heteroarylalkyl;

R₉ is selected from C₁ - C₄ alkyl and C(O)-alkyl;

R₁₀ and R₁₁ are the same or different and independently selected from H, C₁-C₄ alkyl, and -C(O)-alkyl;

R₁₂ is selected from H, C₁-C₆ alkyl, C₄ - C₉ cycloalkyl, C₄ - C₉ heterocycloalkyl, C₄ - C₉ heterocycloalkylalkyl, aryl, mixed aryl and non-aryl polycycle, heteroaryl, arylalkyl, and heteroarylalkyl;

R₁₃ and R₁₄ are the same or different and independently selected from H, C₁-C₆ alkyl, C₄ - C₉ cycloalkyl, C₄ - C₉ heterocycloalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl, amino acyl, or R₁₃ and R₁₄ together with the nitrogen to which they are bound are C₄ - C₉ heterocycloalkyl, heteroaryl, polyheteroaryl, non-aromatic polyheterocycle or mixed aryl and non-aryl polyheterocycle;

R₁₅ is selected from H, C₁-C₆ alkyl, C₄ - C₉ cycloalkyl, C₄ - C₉ heterocycloalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and (CH₂)_mZR₁₂;

R₁₆ is selected from C₁-C₆ alkyl, C₄ - C₉ cycloalkyl, C₄ - C₉ heterocycloalkyl, aryl, heteroaryl, polyheteroaryl, arylalkyl, heteroarylalkyl and (CH₂)_mZR₁₂;

R₁₇ is selected from C₁-C₆ alkyl, C₄ - C₉ cycloalkyl, C₄ - C₉ heterocycloalkyl, aryl, aromatic polycycle, heteroaryl, arylalkyl, heteroarylalkyl, polyheteroaryl and NR₁₃R₁₄;

m is an integer selected from 0 to 6; and

Z is selected from O, NR₁₃, S and S(O);

or a pharmaceutically acceptable salt thereof.

Claims 21-28 (canceled)